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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,770	12/22/2000	Ron J. Vandergeest	10500.00.8171	4395
23418 7590 08/17/2007 VEDDER PRICE KAUFMAN & KAMMHOLZ 222 N. LASALLE STREET CHICAGO, IL 60601			EXAMINER LANIER, BENJAMIN E	
			ART UNIT 2132	PAPER NUMBER
			MAIL DATE 08/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/747,770

Applicant(s)

VANDERGEEST ET AL.

Examiner

Benjamin E. Lanier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-31 is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

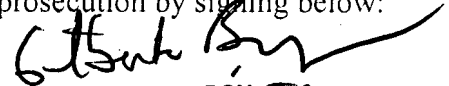
1. In view of the Appeal Brief filed on 27 February 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below. The new ground of rejection resulted from confusion with respect to particular claim elements that arose as a result of numerous claim amendments, which resulted in the misapplication of the Rai reference. The correct application of the Rai reference is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



GILBERTO BARRON JR

*Response to Arguments*

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

2. Applicant's argument that "what Crane actually teaches is that the 'yes' or 'no' response or the 'authentication token' or other information may instead of being digitally signed, may be sent via a secure link. It does not teach or suggest the returning of an authentication code that is then matched with a sent authentication code to authenticate a user as required by the claim,"

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been fully considered and is persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shi, U.S. Patent No. 5,875,296.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: receipt of the authentication code by the first unit. The claims require that the first unit digitally sign the authentication code, however, the first unit has not actually received the authentication code such that it could be digitally signed by the first unit.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, 6, 7, 17, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Shi, U.S. Patent No. 5,875,296. Referring to claims 1, 6, 17, Shi discloses a web server user authentication system with cookies wherein a user provides a user id and password to a web server (Col. 8, lines 32-34). The web server sends the user id and password to the session manager for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47), which meets the limitation of sending, by a first unit, user identification data to an

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authentication unit. If user authentication is successful a unique id is created for the user (Col. 8, lines 55-58), which meets the limitation of an authentication code. A cookie that includes the unique id is sent to the user (Col. 8, lines 61-63), which meets the limitation of using, user identification data, sent by the first unit to determine which destination unit will receive an authentication code to be used to authenticate the user, and sending the authentication code to determine destination unit based on the user identification data because the web server knows which user terminal to transmit the created unique id based upon the previous user id and password that was previously submitted. On subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of returning the authentication code to the authentication unit, and authenticating the user when the returned authentication code matches the sent authentication code.

Referring to claims 2, 7, 18, Shi discloses that the unique id is session based (Col. 3, lines 8-12), which meets the limitation of the step of generating the authentication code on a per authentication session basis and sending the authentication code to the determined destination unit in response to the generated authentication code.

Referring to claim 4, Shi discloses that on subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of the step of receiving user input in response to the step of sending

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the authentication code and waiting to return the authentication code to the authentication unit until receipt of the user input.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 3, 8, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of McCann, U.S. Patent No. 6,052,725. Referring to claims 3, 8, 19, Shi discloses that the web server transmits a generated unique id to the same client which requests services (Col. 8, lines 61-63). McCann does not disclose what client information is maintained allowing the unique id to be transmitted to the same client which requested services. One of ordinary skill in the art would understand that this could be accomplished by obtaining and storing the IP address of the client. McCann discloses obtaining and storing the IP address of a client for the duration of a communication session with an IP network (Abstract), which meets the limitation of maintaining per user destination unit data including at least one destination unit

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identifier per user and wherein the step of using the user identification data to determine which destination unit will receive the authentication code includes sending the authentication code to the determined destination unit based on the stored per user destination unit identifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the session manager associated with the web server of Shi to obtain and store the IP address of the client in association with the user id/unique id in order to provide reduced response time as taught by McCann (Col. 1, lines 61-63).

10. Claims 5, 9, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Schneier, Applied Cryptography. Referring to claims 5, 9, 20, Shi does not disclose that the cookie is digitally signed prior to being authenticated by the session manager. It would have been obvious to one of ordinary skill in the art at the time the invention was made to digitally sign the cookie of Shi in order to verify the source of the cookie as a valid source as taught by Schneier (Pages 35-36).

11. Claims 10, 11, 13, 16, 21, 22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630. Referring to claims 10, 21, Shi discloses a web server user authentication system with cookies wherein a user provides a user id and password to a web server (Col. 8, lines 32-34). The web server sends the user id and password to the session manager for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47), which meets the limitation of sending primary authentication information by a primary authentication information provider to an authentication unit during a session. If user authentication is successful a unique id is created for the user (Col. 8, lines 55-58), which meets the limitation of an authentication code. A cookie

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that includes the unique id is sent to the user (Col. 8, lines 61-63), which meets the limitation of using the primary authentication information to determine which destination unit will receive an authentication code as secondary authentication information to be used to authenticate the user, and sending the authentication code to the destination unit based on the primary authentication information during the same session because the web server knows which user terminal to transmit the created unique id based upon the previous user id and password that was previously submitted. On subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of returning the authentication code to the authentication unit during the same session, and authenticating the user when the returned authentication code matches the sent authentication code. Shi does not specify that the communication environment is wireless. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the web server user authentication system of Shi in a wireless environment because wireless networks take advantage of the inherently bursty and delay-tolerant nature of data traffic to make efficient use of wireless resources as taught by Rahman (Col. 2, lines 37-41).

Referring to claims 11, 22, Shi discloses that the unique id is session based (Col. 3, lines 8-12), which meets the limitation of the step of generating the authentication code on a per authentication session basis and sending the authentication code to the determined destination unit in response to the generated authentication code.

Referring to claims 13, 24, Shi discloses that on subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential



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database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of the step of receiving user input in response to the step of sending the authentication code and waiting to return the authentication code to the authentication unit until receipt of the user input.

Referring to claim 16, Shi discloses that the web server sends the user id and password to the session manager for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47). If user authentication is successful a unique id is created for the user (Col. 8, lines 55-58), which meets the limitation of validating the primary authentication information.

12. Claims 12, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S.

Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630 as applied to claim 10, 21

above, and further in view of McCann, U.S. Patent No. 6,052,725. Referring to claims 12, 23.

Shi discloses that the web server transmits a generated unique id to the same client which requests services (Col. 8, lines 61-63). McCann does not disclose what client information is maintained allowing the unique id to be transmitted to the same client which requested services.

One of ordinary skill in the art would understand that this could be accomplished by obtaining and storing the IP address of the client. McCann discloses obtaining and storing the IP address of a client for the duration of a communication session with an IP network (Abstract), which meets the limitation of maintaining per user destination unit data including at least one destination unit identifier per user and wherein the step of using the user identification data to determine which destination unit will receive the authentication code includes sending the authentication code to the determined destination unit based on the stored per user destination unit identifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the

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session manager associated with the web server of Shi to obtain and store the IP address of the client in association with the user id/unique id in order to provide reduced response time as taught by McCann (Col. 1, lines 61-63).

13. Claims 14, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630 as applied to claims 10, 21 above, and further in view of Schneier. Referring to claims 14, 25, Shi does not disclose that the cookie is digitally signed prior to being authenticated by the session manager. It would have been obvious to one of ordinary skill in the art at the time the invention was made to digitally sign the cookie of Shi in order to verify the source of the cookie as a valid source as taught by Schneier (Pages 35-36).

14. Claims 15, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630 as applied to claims 10, 21 above, and further in view of Lewis, U.S. Patent No. 6,738,635. Referring to claims 15, 26, Shi does not specify that the communication environment is wireless. Rahman discloses a wireless environment, but not SMS. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an SMS wireless channel in the web server user authentication system of Shi because SMS enables communications to be distributed to mobile units at a specified time as taught by Lewis (Col. 11, lines 48-65).

***Allowable Subject Matter***

15. Claims 27-31 are allowed.

***Conclusion***

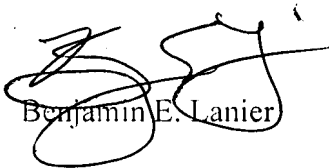
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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Lanier whose telephone number is 571-272-3805.

The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Benjamin E. Lanier